

The Battle of Neighborhoods: New York: The City of Pizza

Where Pizza-Hungry Tourists Should Visit in New York City

Introduction

Although pizza originated in Naples, Italy many people associate the cosmopolitan metropolis of New York City with the dish. It is likely the case that the modern-day version of New York style pizza was created by Italian immigrants in New York City at the turn of the 20th Century.

In a city known for its availability of high-quality and cheap pizza shops, we are curious to know more about neighborhood differences in pizza availability throughout the city.

Problem

If a tourist were interested in sampling pizza when visiting New York City, it could be overwhelming to know where to go. Given that tourists are unlikely to have unlimited time when visiting the city, it is likely that they will search for a neighborhood with the maximum efficiency of pizza options, meaning several pizza restaurants of good quality in the same neighborhood. This project aims to identify what neighborhood(s) are best suited for this mission.

Interest

Although this is a very specific topic designed with pizza-loving tourists in mind, this analysis could also be useful for New York City locals interested in understanding the culinary scene of their city, or by those interested in evaluating potential prospects for new pizza restaurants.

Data Overview

In order to complete this analysis, data was pulled from several open source resources including:

Geographic Data on New York City Neighborhoods

Provided by the New York City Department of Planning (https://geo.nyu.edu/catalog/nyu_2451_34572) this source provides geographic boundaries and coordinates for 306 New York City neighborhoods across 5 boroughs.

Pizza Restaurant Information

Provided by Foursquare API, this information includes details on existing establishments including restaurants in New York City. In addition to providing unique identifying data, geographic locations for establishments, this source also provided user ratings integral to understanding perceived quality of restaurants.

Methodology

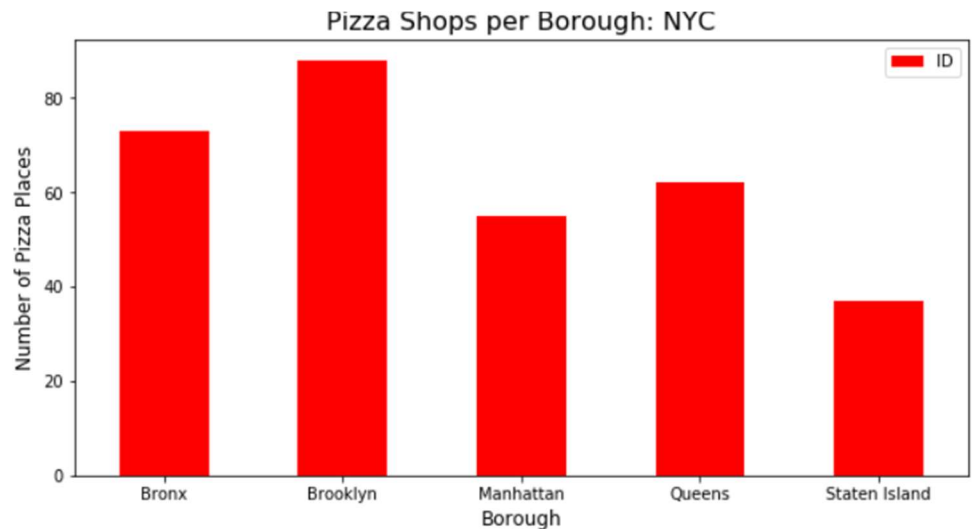
Following the integration of data sources, preliminary data analysis was conducted to better understand the data.

An early decision point was to understand that while many restaurants may serve pizza the goal of this exercise was to explicitly identify establishments primarily serving pizza, and thus not focus on

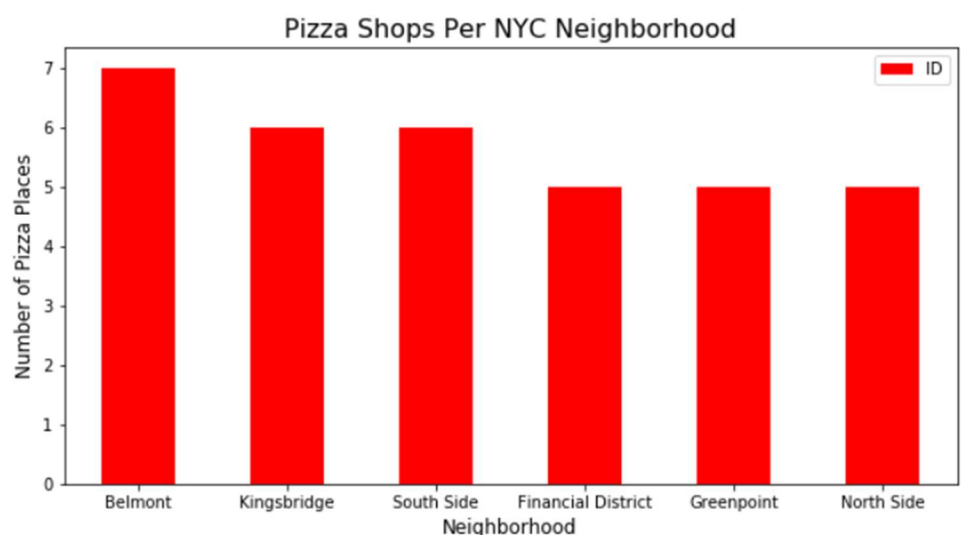
restaurants with a mixed menu. This was possible by leveraging Foursquare API categories to isolate the 314 restaurants in New York City specifically classified as being primarily pizza restaurants.

Next, it was important to understand how these pizza restaurants were spread across boroughs and neighborhoods in New York City.

We see that although we often think of Manhattan for its skyscrapers that it is actually Brooklyn and the Bronx that shine when it comes to the volume of pizza shops.



Not surprisingly, neighborhoods in Brooklyn and the Bronx are well represented on the list of top neighborhoods by number of pizza shops, with Bronx neighborhoods occupying the first and tied for second position. South Side, in Brooklyn is represented tied for second as well.



In the analysis it was decided that as a tourist is primarily focusing on efficiency when conducting pizza tourism that these top neighborhoods should be focused on.

The next important analysis step involved brining in pizza shop quality measures along with the neighborhood location data as it would be unappealing to a tourist if all pizza shops were of low quality. Thus, publicly available user rating data was combined with the data and analyzed across shops and neighborhoods.

Neighborhood	Borough	Avg. Rating (out of 10)
South Side	Brooklyn	9.1
Belmont	Bronx	8.6
Kingsbridge	Bronx	7.5

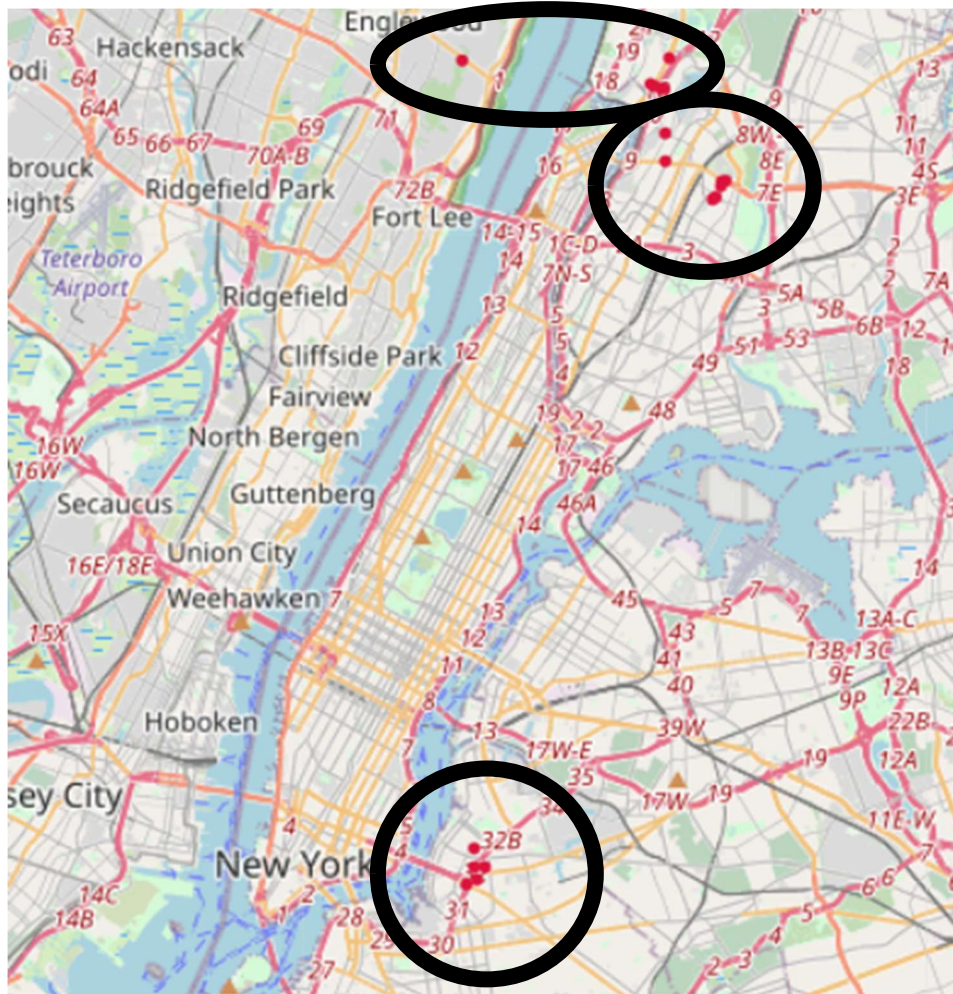
Discussion

Each tourist may take away different information from the analysis, and also may color their interpretation based on convenience associated with other elements of their trip. It is also worth noting that while Belmont and Kingsbridge boast high density of pizza shops, their quality is not necessarily stable, despite being overall well reviewed.

Neighborhood	Borough	# Shops	Avg. Rating	Rating St. Dev.
South Side	Brooklyn	6	9.1	0.41
Belmont	Bronx	7	8.6	1.07
Kingsbridge	Bronx	6	7.5	1.67

South Side in Brooklyn is both the highest rated neighborhood for quality pizza and the level of quality is most consistent across establishments of the target neighborhoods.

It is also worth noting that while each neighborhood is relatively small, the restaurants in South Side are incredibly close together, this would be even more appealing for a tourist on a tight schedule, as indicated by the neighborhood towards the south of the below map.



Conclusion

With the large number of total pizza shops in New York City (over 300) it may be difficult to not find one as a tourist.

However, it is clear that for efficient quality pizza eating the South Side neighborhood of Brooklyn offers the tightest group of quality pizza in the city. As evidenced by the number of shops close together and the consistent quality across options.